

**State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**TIME SCHEDULE ORDER NO. R4-2007-YYYY**

**REQUIRING THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS  
AND PEPPERDINE UNIVERSITY  
(MALIBU MESA WASTEWATER RECLAMATION FACILITY)  
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN  
ORDER NUMBER R4-2007-XXXX  
(NPDES PERMIT NO. CA0059099)**

The California Regional Water Quality Control Board, Los Angeles Region (hereafter Regional Board), finds:

1. The Los Angeles County Department of Public Works is the owner and operator of Malibu Mesa Wastewater Reclamation Facility, POTW. Pepperdine University owns the property located at 3863 Malibu Country Drive, Malibu, California on which the facility is located. Together, Los Angeles County Department of Public Works and Pepperdine University are hereinafter collectively referred to as Discharger. Also, Pepperdine University is hereinafter referred to as User, as the University uses the treated (recycled) wastewater for landscape impoundment and irrigation at the Pepperdine University campus. The landscape impoundment (also know as storage reservoirs) and the irrigation facilities are owned, operated, and maintained by the Pepperdine University.
2. The Malibu Mesa WWRF discharges tertiary-treated wastewater under waste discharge requirements contained in Order No. R4-2007-XXXX, adopted by this Regional Board on January 11, 2007. Order No. R4-2007-XXXX also serves as a permit under the National Pollutant Discharge Elimination System (NPDES No. CA0059099), which regulates the discharge of treated wastewater to the Marie Canyon and an unnamed canyon west of Marie Canyon, a water of the United States, tributary to the Puerco Beach, thence to Santa Monica Bay.
3. NPDES Order No. R4-2007-XXXX, adopted on January 11, 2007, prescribes new effluent limitations for ammonia nitrogen and nitrate + nitrite as nitrogen:

August 28, 2006

**Table 1. Final Effluent Limitations**

Constituent	Units	Discharge Limitations		
		Maximum Daily <sup>1</sup>	7-Day Average	Average Monthly <sup>2</sup>
Ammonia nitrogen	mg/L	22.02 <sup>3</sup>	--	3.15 <sup>4</sup>
	lbs/day <sup>5</sup>	36.73	--	5.25
Nitrate + nitrite as nitrogen	mg/L	--	--	10
	lbs/day <sup>5</sup>	--	--	16.68

<sup>1</sup> Maximum Daily Effluent Limitation (MDEL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day. Compliance with the monthly average final effluent limit will be determined according to Section VII.E. of the Order No. R4-2007-XXXX.

<sup>2</sup> Average Monthly Effluent Limitation (AMEL) means the highest allowable average of daily discharge over a calendar month, calculated as the sum of all daily discharges measures during that month divided by the number of days on which monitoring was performed. Compliance with the monthly average final effluent limit will be determined according to Section VII.C. of the Order No. R4-2007-XXXX.

<sup>3</sup> The maximum daily effluent limitation (MDEL) is calculated using the equation prescribed in the adopted Basin Plan amendment: Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life*. The facility discharges into a receiving water not designated *COLD* and/or *MIGR*. The maximum observed pH value of 7.43 was used in the calculation to be protective of the most sensitive species.

$$\text{One-hour Average Concentration} = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$$

<sup>4</sup> The average monthly effluent limitation calculated using the equation prescribed in the adopted Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life*. The facility discharges into a receiving water designated *SPWN*. The maximum observed pH value of 7.43 and temperature of 20°C were used in the calculation to be protective of the most sensitive species.

$$30\text{-day Average Concentration} = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * \text{MIN}(2.85, 1.45 * 10^{0.028 * (25 - T)})$$

<sup>5</sup> The mass emission rates are based on the plant design flow rate of 0.20 mgd. Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

- A. This final effluent limit takes effect on the effective date of the NPDES Order No. R4-2007-XXXX; i.e., 50 days after its adoption (March 2, 2007).
  - B. Treated effluent from the Malibu Mesa WWRF will consistently exceed the AMELs for ammonia nitrogen and nitrate + nitrite as nitrogen. Therefore, interim limits are needed for ammonia nitrogen and nitrate + nitrite as nitrogen.
  - C. To achieve compliance with the effluent limitations, the Discharger may modify or improve the treatment system, explore source reduction options or conduct studies leading to approvable site-specific objectives (SSOs). Regional Board approval of Basin Plan amendments for the SSOs must be obtained on or before the final compliance dates.
- 4. California Water Code (CWC) section 13300 allows the Discharger “to submit for approval by the board, with such modifications as [the board] may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.”
  - 5. In conformance with Water Code section 13385(j)(3), the Discharger shall submit a workplan specifying actions that the Discharger will take in order to prevent the violations of the applicable effluent limitations for ammonia nitrogen and nitrate + nitrite as nitrogen. Further, the limitations covered by this TSO are necessary because the effluent limitations became effective after July 1, 2000 and the appropriate control measures cannot be put into operation within 30 days. The Regional Board had concluded that the Discharger’s 5-year compliance schedule was as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures.
  - 6. This TSO allows the Discharger to achieve full compliance with the ammonia nitrogen and nitrate + nitrite as nitrogen limitations, and prescribes interim limits for ammonia nitrogen and nitrate + nitrite as nitrogen for the Malibu Mesa WWRF to comply until the final compliance date.
  - 7. Exceedances of the new NPDES limits for ammonia nitrogen and nitrate + nitrite as nitrogen are not subject to CWC Section 13385 subdivisions (h) and (i) as long as the Discharger complies with all of the requirements of the TSO; does not exceed the interim limits; and, meets requirements A through D of CWC Section 13385(j)(3).
  - 8. The action taken by this Regional Board pertaining to the TSO does not preclude the possibility of actions to enforce the waste discharge requirements and permit by third parties pursuant to section 505 of the Federal Clean Water Act.

9. The Regional Board may reopen this TSO at its discretion or at the request of the Discharger, if warranted.
10. This TSO concerns an existing facility, does not otherwise alter the status quo with respect to the facility, and is, therefore, categorically exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et.seq.) in accordance with Section 15301 of Title 14, California Code of Regulations.

The Board notified the Discharger and interested agencies and persons of its intent to issue a Time Schedule Order concerning violations or threatened violations of waste discharge requirements.

The Board, in a public hearing, heard and considered all testimony pertinent to this matter. All Orders referred to above, Regional Board files on this matter, and records of hearings and testimony therein are included herein by reference.

**IT IS HEREBY ORDERED** that, pursuant to the California Water Code section 13300, the Los Angeles County Department of Public Works and Pepperdine University, as operator of the Malibu Mesa Wastewater Reclamation Facility, shall:

1. Comply with the following interim effluent limit on the effective date of NPDES Order No. R4-2007-XXXX:

**Table 2. Interim Effluent Limitations**

Constituent	Units	Average Monthly	Maximum Daily
Ammonia nitrogen	mg/L	25.40 <sup>6</sup>	--
	lbs/day <sup>7</sup>	42.67	
Nitrate + nitrite as nitrogen	mg/L	34.80 <sup>6</sup>	--
	lbs/day <sup>7</sup>	58.05	

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<sup>6</sup> The interim limit is based on effluent performance data from January 2001 through December 2005 for the Malibu Mesa WWRF. The average monthly interim effluent limit was derived statistically as the 99% confidence level of the 95th percentile, using the P-limit software. This program incorporates the procedure in Appendix E of the *Technical Support Document (TSD) For Water Quality-Based Toxics Control [EPA/505/2-90-001]* for the limit calculation.

<sup>7</sup> The mass emission rate is calculated as follows, using the design capacity of 0.20 mgd. Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

2. Submit the pollution prevention plan (PPP) workplan with the time schedule for implementation for approval of the Executive Officer within 120 days after the adoption of this TSO (by May 10, 2007), pursuant to CWC section 13263.3.
3. Achieve full compliance with the limitations in NPDES Order No. R4-2007-000A for ammonia nitrogen and nitrate + nitrite as nitrogen by December 10, 2011.
4. Submit quarterly progress reports of efforts towards compliance with the effluent limits for ammonia nitrogen and nitrate + nitrite as nitrogen to include, but not limited to:
  - a. Status of the plant modification/upgrade activities;
  - b. Source reduction activities; and/or,
  - c. Status of the development of SSOs and/or UAAs.

Progress reports shall be submitted by the fifteenth day of the first month following the reporting quarter (January 15, April 15, July 15 and October 15). The first progress report shall be received at the Regional Board by April 15, 2007, and will cover the months of January 2007 through March 2007. The first progress report shall also include an update on the status of the derivation of the SSO and/or UAA.

5. If the Discharger fails to comply with any provisions of this Order, the Executive Officer may issue an Administrative Civil Liability Complaint pursuant to California Water Code section 13323. The Regional Board may also refer the case to the Attorney General for injunction and civil monetary remedies, pursuant to California Water Code sections 13331 and 13385.
6. All other provisions of NPDES Order No. R4-2007-XXXX not in conflict with this Order is in full force and effect.

I, Jonathan S. Bishop, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on January 11, 2007.

Jonathan S. Bishop  
Executive Officer

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